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THE PLANT DISEASE REPORTER

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Volume XII Number 6

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BUREAU OF PLANT INDUSTRY
UNITED STATES DEPARTMENT OF AGRICULTURE

THE PLANT DISEASE REPORTER

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THE OFFICE OF MYCOLOGY AND DISEASE SURVEY

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SURVEY FOR BUNT OF WHEAT (TILLETIA SPP.) IN KANSAS

C. E. Graves, Extension Plant Pathologist of the Kansas Agricultural College conducted a survey during the latter part of June for cereal diseases with particular reference to bunt. The western two-thirds of the state were included. Prof. Graves personally visited 12 counties and sent out questionnaires to county agents and instructors in vocational agriculture in several others. Estimates were made in 25 counties all together. A total number of 241 fields and plots were reported on and in these stinking smut averaged 2.4 per cent infection. In 170 fields and plots where the seed was untreated the smut count averaged 3.31 per cent while in a total of 71 fields where the seed was treated the smut count was only 0.24 per cent. In a demonstration plot at Mineola, Ford County, 55 per cent bunt was evident in the untreated part of the field. At Dodge City another demonstration plot showed 74 per cent bunt in the check. Other maximum percentages were 53 per cent, 25 per cent, 24.8 per cent, and 15 per cent.

BUNT OF WHEAT IN MONTANA

P. A. Young under date of July 16 reports that in southcentral Montana 50 fields aggregating about 6,500 acres have been inspected this season for bunt. The disease was found in 28 of these fields. In 12 of them there were only traces. In two there was from 1 to 3 per cent. In 16 there was from 5 to 30 per cent, average 10 per cent. The inspections have not been entirely completed at this date but the figures above show that bunt will do a lot of damage in Montana. Dr. Young reports that he has examined many spores microscopically and they all are smooth indicating that the species he has to deal with is chiefly Tilletia laevis.

LOOSE SMUT OF WHEAT

Reports on loose smut of wheat have recently been received from Virginia, West Virginia, Wisconsin, Missouri, Montana, Colorado, and Arizona. These reports indicate that this disease may be slightly less prevalent than usual and the opinion is expressed by some collaborators that in the East possibly the

severity of last winter was responsible for a killing out of many diseased plants, as well as many healthy ones, thus reducing the amount of loose smut. In the Western States above mentioned only traces of the disease are reported.

CEREAL RUSTS

The following statement concerning the rust situation in general has been furnished by the U. S. Office of Cereal Crops and Diseases (The Rust Reporter, July 20, 1928).

> "Rusts of small grains have done relatively little damage so far. What will happen in northwestern Minnesota, northeastern South Dakota, and in North Dakota must be left to the future. It is impossible to say. The situation certainly is not so critical as it was at this time last year. Stem rust is present, according to Craigie and others of the Dominion Rust Research Laboratory, as far north at least as Winnipeg, Manitoba. The comparatively light infection in the hard red winter wheat area and in the spring wheat area was very noticeable. Conditions have been favorable for the development of rust in the spring wheat area during July. There have been at least ten days in which the weather was ideal for the development of rust. This is shown clearly by the fact that there is a heavy epidemic of rust on flax in many localities. The comparatively light attack of stem rust up to the present can be attributed therefore principally to the fact that there was relatively little inoculum, and possibly in part to the fact that there is some evidence that some physiologic forms of stem rust of wheat present this year do not attack Marquis normally. The areas of heavy infestation in northeastern South Dakota and west central Minnesota indicate that there was some regional factor which must have been responsible. Considerable numbers of barberries have been found in northeastern South Dakota. Perhaps the responsibility rests with them. This remains to be determined."

STRIPE RUST OF WHEAT (PUCCINIA GLUMARUM)

In Montana, P. A. Young reports traces of stripe rust appearing in the agricultural plots at Bozeman on Jones Fife wheat during the week of June 24. It occurred at this place and on this variety last year also. It has not been observed in commercial fields however. Near Moscow, Idaho, H. B. Humphrey found stripe rust in fully 50 per cent of the fields of Hybrid 128 that he examined June 30. At the Oregon Agricultural College on June 23, Dr. Humphrey noted the disease prevalent on several varieties doing evident and serious damage to a few, especially Red Clawson and White Odessa. Because of the abundance of leaf rust on the same plants it was difficult to determine the relative damage resulting from each rust. Dr. Humphrey also reports the disease from Union County, Oregon, July 2 and Wawawai, Washington, June 22.

WHEAT SCAB (GIBBERELLA SAUBINETII)

Some scab has been reported from West Virginia and Pennsylvania this year but no record of serious loss has been received. From Kentucky, Valleau reports that it has been particularly severe this year and in Wisconsin more than usual has appeared following several weeks of rainy weather. R. H. Porter in Iowa states that the disease is more severe than any season since 1925 and he estimates the loss may be about 4 per cent.

BLACK CHAFF OF WHEAT

In connection with his survey for bunt in Kansas, C. E. Graves found black chaff (Bacterium translucens undulosum) in at least 8 different fields in 7 counties. In practically all of these fields it was apparently causing some loss through shriveling of the wheat kernels.

TAKE-ALL OF WHEAT

In connection with his cereal disease survey in Kansas, C. E. Graves found take-all (Ophiobolus graminis) in two fields in Reno County and one field in Mead County. Several take-all spots were found in each field.

FOOT-ROT OF WHEAT IN NORTHWEST

At The Dalles, Oregon, and Harland, Washington. H. B. Humphrey found foot-rot spots in several wheat fields. At The Dalles about 1,500 acres were involved and at Hartland, about 3,500 acres, making a total of about 5,000 acres of infested wheat. Undoubtedly the disease is of even more widespread occurrence.

BACTERIAL WILT OF SWEET CORN

In three southern Iowa Counties next to the Missouri line bacterial wilt (Aplanobacter stewartii) is doing severe damage to sweet corn, according to R. H. Porter, June 25. This is the first year that the disease has been reported as troublesome in that state.

CORN ROOT ROT

In West Virginia, W. A. Archer reports that in the Eastern Panhandle the fields that he inspected showed about 50 per cent corn root rot. In the central part of the state also it is affecting high percentages of the plots.

Isolations made at Morgantown have invariably yielded species of Fusarium. At other points in the state the disease seems to be less severe ranging from 1 to 5 per cent in most fields.

SOYBEAN MOSAIC IN TENNESSEE

"The Department of Agronomy of the Tennessee Agricultural Experiment station are testing a number of varieties of soy beans for yield, growth, etc. Five of these varieties show marked symptoms of mosaic. The smaller size of affected plants is very noticeable. Mosaic symptoms are showing in triplicate plantings of all varieties. Specimens are on file at Knoxville from five plots and photographs were taken in four of the plots. This information together with the following details was supplied by J. O. Andes in a letter dated July 17.

"#61259 U.S.D.A. Planted June 8, 1928. No fertilizer used. General lack of vigor, mosaic symptoms showing generally through row. Varieties on either side in good condition and exhibit no such characteristics.

"#62834 - Same as 61259. Lowest yield of any variety past year. Adjoining row one of best.

"Mammoth Yellow - Same as 61259.

"#71439 - Same as 61259.

"Yokoten General mosaic appearance."

FIRE BLIGHT (BACILLUS AMYLOVORUS) OF APPLE IN NORTH CAROLINA

"On a trip from Raleigh, N. C. southward Dr. Poole and I were interested in making a count of the percentage of apple trees in home orchards along the roadside that were infected with blight as visible from the automobile in passing. All trees that could be easily seen from the machine were counted. Out of 137 trees recorded, 79 or 58 per cent showed blight. A closer examination would undoubtedly have revealed a much higher percentage of infection. (Haskell, July 8.)

APPLE FROG-EYE (PHYSALOSPORA CYDONIAE)

According to F. J. Schneiderhan of Virginia, frog-eye is of minor importance in properly sprayed orchards to date but in poorly sprayed and poorly pruned orchards particularly of the Ben Davis and Stayman varieties infection is severe and some defoliation has occurred.

In Arkansas, V. H. Young states that the disease is beginning to appear rather abundantly, and probably there will be considerable defoliation before the season is over.

PEAR SCAB (VENTURIA PYRINA)

In at least one Bartlett orchard in Wayne County, New York, at least 15 per cent of the fruit is scabbed and the foliage badly infected, according to E. E. Frane, July 2. D. G. Milbrath states that it is widely distributed and severe in California this year causing a possible crop loss of 2 per cent.

PEAR BLIGHT (BACILLUS AMYLOVORUS)

Practically every pear tree seen in yards and orchards along the road between Raleigh, North Carolina, and Griffin, Georgia, showed more or less twig blight or dying of limbs. A count of 42 pear trees between Raleigh and Sanford, North Carolina, showed 98 per cent with twig blight. A number of trees of so-called Pineapple pears were seen in these states which were apparently free from the disease. From Florida, Erdman West writes August 1 that blight has not been more prevalent than usual in spite of heavy spring rainfall. In Arkansas, it is severe on pears in all parts of the state, mostly on the Kieffer variety according to C. Woolsey.

The situation with regard to blight in California is serious. In 1927, pathologists in that state estimated that there was a loss of about $2,000,000 on account of this disease. This included the cost of removing trees, cutting out blight, and reduction in yield. The estimated value of an average tree was placed at ten dollars. In individual counties as many as 40,000 trees were grubbed out and in one county alone the loss was about $700,000. The condition in 1928 seems to be about the same as in 1927, according to D. G. Milbrath of the State Department of Agriculture. A new development is the appearance of the disease in several of the coastal counties.

BROWN ROT DAMAGES GEORGIA PEACHES

In the Georgia peach section there is a considerable amount of brown rot (Sclerotinia fructicola) this year. Continuous rains and cloudy weather have been very favorable for this disease. In the Division Letter of the Bureau of Agricultural Economics (9: 212. July 20, 1928) R. H. Shoemaker reports that the Central of Georgia Railroad has reduced their estimates by 1,500 cars on account of the loss through the culling out of small stock and loss in tonnage due to brown rot. He states that at Macon, Georgia, between May 5 and July 3 it rained every day.

REPORTS ON BACTERIUM PRUNI

Kentucky: "What is generally considered to be defoliation by B. pruni is severe in Henderson and McCracken Counties. Where defoliation is severe fruit spotting is severe. Where defoliation is less severe the fruit spotting is less severe.

Following an inspection of a considerable number of orchards, the following conclusions were reached.

1. Where defoliation is severe it is a manifestation of nitrogen starvation and not defoliation due to B. pruni.

2. Where nitrogen has been furnished in abundance by growing legumes in the orchard, defoliation does not occur even though the leaves are riddled with spots.

3. Commercial control of spotting on the fruits is obtained by the use of legumes in the peach orchard. (Valleau, Aug. 1)

Virginia: Seems to be very common this season. Causing severe injury to two year old Elberta trees at Purcellville, Loudoun County. Present on both foliage and branches. Also causing heavy defoliation in vicinity of Lynchburg, Campbell County. (Wingard, 1928)

CALIFORNIA PEACH DISEASE REPORT

D. G. Milbrath of the State Department of Agriculture at Sacramento, California has sent in the following notes dated July 1:

Leaf curl (Exoascus deformans). "Severe, general on unsprayed trees. Loss on such trees very heavy. Much fruit infection has occurred. Such fruit is deformed by cracks and hypertrophy. Gumming follows on fruit. Crop loss trace.

A condition of green spot in much fruit might be late infection. This is now being investigated. If this proves true, then the loss will be about 2 per cent.

Powdery mildew (Sphaerotheca pannosa). "Severe and general; leaves, twigs and fruit attacked. When attack falls early in season, fruit can outgrow effects. Late attack leaves browned epidermis on fruit. Loss about 0.5 per cent.

Rust (Puccinia pruni). Severe on leaves, not able to determine losses at this early date.

Fruit rot (Sclerotinia libertiana). Localized, follows injury by tree crickets. Loss trace.

OUTBREAK OF PEACH ROSETTE

W. D. Valleau of the Agricultural Experiment Station, Lexington, Kentucky, reports August 1 that in 1927 about seven trees in two orchards in

McCracken County died on account of rosette. This year the disease has been found in at least 15 orchards in that section. He further states:

> "There is an association between an abundance of Erigeron affected with aster yellows (identification by Kunkel), and wild perennial asters apparently affected with yellows, and the rosette of peaches. The two diseases have the same type of effect on their respective hosts. (Valleau, August 1).

WINTER KILLING OF SOUR CHERRIES IN ILLINOIS

> "The sour cherry is supposedly resistant to winter injury in this section but thousands of trees were killed last winter by abnormal weather. Leaf spot defoliated most of the trees last summer. Favorable fall weather resulted in new growth and many cherry trees bloomed in the fall. The same conditions which caused the killing of most of our winter wheat must have been hard on cherries. (Anderson, July 1).

BLACK ROT OF GRAPES (GUIGNARDIA BIDWELLII)

At McBee, South Carolina, R. F. Poole and R. J. Haskell on July 9 observed a vineyard consisting of numerous varieties of both American and European grapes which showed heavy black rot infection on the fruit of some of the American varieties. The vines had not been sprayed until after the disease appeared. The case was an argument for early spraying in order to control black rot in this section.

V. H. Young of Arkansas writes us July 15 that black rot is extremely serious in all parts of that state and the losses will be heavy. Extremely wet weather interferred with spraying during May and June.

STRAWBERRY ROOT ROT

Numerous complaints of damage from strawberry root rot have been received by the Department this spring. A serious case on the Eastern Shore, Virginia, was called to our attention in June by F. P. McWhorter. On July 1, R. E. Vaughan reported it to the Survey from Racine County on plants which had originally come from Michigan. On July 15, Clinton of Connecticut writes as follows:

> "As in past years we have had a complaint or two of Root rot of strawberry plants. Mycelium is often associated with these rots but as no fungus has been definitely accused of the trouble we report it as winter injury until we learn differently. If we are wrong, someone correct us. (Clinton, July 15).

RASPBERRY MOSAIC

Reports from W. H. Davis of Massachusetts and G. P. Clinton of Connecticut indicate that raspberry mosaic is very prevalent and evident in those states this year. Clinton concludes that this is partly due to the fact that last year was favorable for infection.

AVOCADO ANTHRACNOSE

Erdman West of the Florida Experiment Station writes as follows, August 1:

> "Several reports and specimens have been received recently where anthracnose was causing considerable damage. The organism closely resembles Colletotriclum gloeosporioides if it is not identical. The disease affects the fruit spurs and causes the fruit to drop. Many of the fruit subsequently rot with the same organism.

BEAN MOSAIC IN MONTANA

> "Many fields of beans were observed or inspected in the south-central part of the state, and traces of mosaic were seen in many of them. Hot weather and the juvenile condition of the plants probably explains the absence of prominent and abundant symptoms. Mosaic symptoms have not yet appeared prominently in plants resulting from diseased seed that I planted in May. (P. A. Young, July 16).

BEAN ANTHRACNOSE (COLLETOTRICHUM LINDEMUTHIANUM)

The states of Wisconsin, Iowa, and Arkansas report more bean anthracnose than usual. It is thought not to be as serious as bacterial blight in Wisconsin.

SCLEROTIUM ROT OF CANTALOUPE

> "A two acre field of cantaloupes on the farm of Mr. Hawkins has developed a tremendous amount of Sclerotium rot. The field is located about six miles from Norfolk on a farm where egg-plants have been grown for many years. During 1926 and 1927, the writer observed some southern wilt (organism typical Sclerotium rolfsii) in the egg-plants when they were passing through juvenile stages. The cantaloupe field referred to has never been planted to egg-plants, but has been planted to carrots. The preceding crop of

carrots was only partially pulled, and the remaining carrots were left in the soil. At the time of this report every full grown, ripe or unripe cantaloupe is rotting with the Sclerotium rot, and the fruits are literally plastered with masses of Sclerotia.

It appears to be a "100 per cent infection". The writer has never before observed this rot in Virginia." (McWhorter, July 21).

POWDERY MILDEW OF CANTALOUPE

D. G. Milbrath writes that this disease (Erysiphe sp.) continues to be widely distributed in the Imperial Valley in California and that the loss will probably be about 3 per cent this year. According to him it is being held in check more or less by sulfur dusting. This disease was observed as prevalent by the southern pathologists during the course of their summer field-meet at Sylvester and Tifton, Georgia. In the commercial fields at Tifton it was causing considerable damage and a grower stated that during some years it has been very serious.

CUCUMBER MOSAIC VIRUS PRODUCES RINGSPOT IN TOBACCO

Kentucky: Cucumber mosaic specimens collected in western Kentucky proved to be affected with the tobacco ring spot virus when inoculations were made to tobacco. (Valleau, Aug.1).

BACTERIAL WILT OF CUCUMBER PREVALENT IN TIDEWATER SECTION, VIRGINIA

"Bacterial wilt (Bacillus tracheiphilus) is far more general and severe in cucumbers this year than in 1927. This record is certainly not correlated with a superabundance of beetles. On the contrary it appears to result from the activities of a relatively few beetles, an unusually large number of which are active carriers. (McWhorter, July 21).

BROWN BLIGHT OF LETTUCE (UNDET.)

Brown blight was originally described by Jagger from California and Arizona (Pl. Dis. Reptr. Supple. 45: 101-102, 1926). R. B. Streets reports from Arizona under date of July 1 as follows:

"This disease is becoming more prevalent and destructive especially where lettuce is grown more than one year on the same soil. The first year it causes but slight commercial loss; the second year a moderate loss; and the third year usually a severe loss. Reported in Maricopa County, probably in other lettuce producing sections." (Streets, July 1).

ONION SMUT (UROCUPTIS CEPULAE) IN IOWA

"Damage severe on smut infested soil in the event that the event that the formaldehyde drip was not used. This drip is giving nearly perfect control. (Porter, June 16.)

LATE BLIGHT OF POTATO

According to R. E. Vaughan this disease was located for the first time this year in Baron County, July 17 in a field of early planted Cobblers. W. H. Davis of Massachusetts writes that he has been on the lookout for it but up until July 20 had not observed a single blighted leaf. H. R. Angell states that it is severe in Washington County, Virginia. From West Virginia, W. A. Archer reports as follows:

"Infection occurred somewhat earlier than usual and indications would point to the possibility of more than average loss this year. As yet, no field has been found totally destroyed, but where infection does occur it is well distributed in the field. A number of growers have already begun regular spraying."

TOMATO DISEASE REPORT FROM ARKANSAS

Nailhead (Alternaria) (?). "Very common on early shipping varieties both on leaves and fruit causing serious loss.

Septoria leaf blight (Septoria lycopersici). Seen in severe form in a few cases.

Buckeye rot (Phytophthora terrestris). Sent in from Russellville, Ark.

Blossom-end rot (physiological) . Very serious in many plantings. One planting of 18 acres reduced 75-80 per cent. (Young, July 15).

WATERMELON WILT

In Iowa D. R. Porter states that watermelon wilt is more serious this year on seedlings than it has been for three years. In some fields the stand has been reduced by 50 per cent on account of it. H. G. Dickerson located at Prairie View, Texas, reports about 15 per cent infection in his locality to date. In Arizona, R. B. Streets says that it is becoming more prevalent and destructive each year, and that the first report for 1927 came from Yuma County, April 26.

LIGHTNING INJURY TO COTTON AND WATERMELONS

On July 9 a circular spot about 30 feet in diameter was observed in a cotton field near Bethune, South Carolina, where the majority of the cotton plants had recently been killed, evidently by lightning. In a watermelon field near Tifton, Georgia, July 16, a similar spot about 40 feet in diameterwas observed where the watermelon vines and also certain weeds in the area, had been killed. The melons, which were practically grown, had become yellow.

ESTIMATES OF LOSSES FROM COTTON ROOT ROT IN TEXAS, 1928

"About 3 per cent loss in South Texas, 2 per cent loss in West Central and Central Texas, 1 per cent to 1 1/2 per cent in North, Northeast, East, and Southeast Texas, 1 per cent in West Texas. (Taubenhaau, July 13).

COTTON WILT

V. H. Young of Arkansas states that wilt is later in appearing this year than usual, only traces having been found up to July 15. He thinks that this is probably due to cool weather of May and June. Cotton fields through the Carolinas and Georgia were not showing much wilt on July 15 according to observations made by some of the southern Pathologists on their recent field trip.

TOBACCO DISEASES IN KENTUCKY

Frenching (Nitrogen deficiency). Frenching is more prevalent than usual and is markedly aggravated by lime. In some instances, on limed plots, nitrates added to half the plot before setting resulted in control. (Valleau, August 1).

Mosaic (virus) Excellent control is being obtained by furnishing plant pullers with sterile chewing tobacco, if they chew, and seeing that they washtheir hands thoroughly in soap and water before beginning to pull. Six per cent infection was traced to a man who smoked natural leaf tobacco in a pipe, and crushed the tobacco in his hands before filling his pipe. (Valleau, August 1).

Black root rot (Thielaviopsis basicola). "Very severe this year. The average air temperature for Lexington in June was about four degrees below normal which aggravates the disease. (Valleau, August 1).

TOBACCO DISEASES IN VIRGINIA

Ringspot (virus) . Ringspot of tobacco was found in several fields in Appomattox and Halifax Counties on July 19 and 20. Incidence of the disease varies from traces to about 2 per cent infection. (Angell, August 1).
S. B. Fenne, County Agent in Washington County, reports 1 per cent ringspot infection in a number of Burley tobacco fields. (Wingard, August 1)

Mosaic. The majority of fields in Appomattox and Halifax Counties visited on July 19 and 20 were apparently free from mosaic. In a few fields about 15 per cent of the plants showed typical symptoms and it appeared probable that as "topping" had just been done a much higher percentage of disease may be expected shortly. (Angell, August 1).

Blackfire (Bacterium angulatum). Blackfire was observed on a few plants in several of the fields in Halifax County visited on June 20. It has also been reported from Washington County. (Angell)

FILBERT BLIGHT OF UNKNOWN CAUSE IN OREGON

"Throughout Western Oregon filbert growers are reporting up to 50 percent loss of crop due to a trouble affecting nearly full-sized green nuts and characterized by brown streaks or blotches on the outside of the green shell usually accompanied by or followed by complete browning and collapse of the interior. The immature seed fails to develop further and the nut goes to harvest as a "blank." There is no evidence of a parasitic organism. The trouble has been known for at least 15 years but has appeared in too small amounts as a rule to occasion much concern. This is a year with abundant presence of filbert aphis noted but entomologists do not credit this trouble to the activity of any insect found associated with these trees. Soil and cultural conditions do not appear to have any influence and often one nut in a cluster will be affected while another escapes. (Barss, July 15)

TOBACCO DISEASES IN NORTH CAROLINA

On July 8, R. F. Poole and R. J. Haskell examined several tobacco fields in the vicinity of Apex. The most evident trouble was the condition known as sand drown. The lower three or four leaves were bleached, yellowed, and brown. This was quite evident in many fields as seen from the road in passing. In three fields several spots were found where the bacterial wilt (Bacterium solanacearum) was prevalent. Twenty-one other fields were looked at rather carefully by driving slowly past in the automobile but the wilt was only found in these three fields near Apex. In field number 1, two areas of infestation were noted. The disease seemed to follow along the rows. One row showed 50 per cent infected plants and missing hills, while a neighboring row showed none diseased or missing. This observation seems to point toward spread down the row during setting.

Traces of ringspot were observed in two fields, mosaic was common, and frog-eye (Cercospora) was seen on about 2 per cent of the lower leaves of the fields that were examined.

DAHLIA STUNT (UNDET.)

At Sparta, Georgia, July 10, 12 plants out of about 36 showed extreme dwarfing. For flower production they were absolutely worthless. Among these were some of the better varieties. Eradication of diseased plants was recommended. (Haskell)

DISEASES NOTED DURING FIELD TRIP OF SOUTHERN PATHOLOGISTS

JULY 18-20

About 17 plant pathologists attended the annual meeting of the Southern Division of the American Phytopathological Society. The group assembled at Griffin, Georgia, and went by automobile on a three-day trip from there to Tifton and Thomasville, Georgia, and Quincy, Florida. A few of the diseases that were observed are listed below:

Sclerotium rolfsii, stem rot on tomato, cantaloupe, eggplant, Forsythia and other plants. Was observed at numerous places. This and the root-knot nematode probably cause more damage than any other organism. They are extremely important plant disease problems to Southern agriculture.

Bacterium pruni, bacterial spot of peach at Griffin, Fort Valley, and other places. Very important this year in several orchards on susceptible varieties.

Winter injury of peaches, Griffin, Georgia. One orchard noted very badly damaged and injured trees heavily attacked by Bacterium pruni and injured by spray application.

Cladosporium carpophilum, scab, on peach. Griffin and Fort Valley. Prevalent where spraying was improperly done.

Exoascus deformans, leaf curl of peach. At Griffin causing a considerable amount of fruit infection.

Phoney peach. At Fort Valley. Becoming serious in that section. Some of the results of the important work of the Bureau of Plant Industry that is being done on this disease were noted by visiting pathologists.

Sclerotinia fructicola, brown rot of peach. Destructive in the Fort Valley section.

Phyllosticta solitaria, apple blotch. Griffin.

Gymnosporangium juniperi-virginiae, cedar rust of apple. Griffin, very prevalent on one tree of an especially susceptible variety.

Melanconium fuligineum, bitter rot of grape. Quincy, causing considerable damage and fruit rot.

Isariopsis leaf spot of grape. Quincy, common.

Mosaic (undet.) of pepper. Common in plot at Experiment Station, Griffin.

Cladosporium fulvum, leaf mold of tomato. About 90 per cent of one variety out-doors infected.

Colletotrichum lindemuthianum, anthracnose of bean. Griffin.

Peronospora sojae, downy mildew on soybean. Griffin.

Bacterial leaf spot of kudzu. Griffin.

Oidium sp., powdery mildew of crapemyrtle. Griffin.

Colletotrichum lagenarium, anthracnose of watermelon. Tifton and Thomasville, common, just getting well started. On leaves and fruit.

Diplodia, watermelon. Tifton and Thomasville.

Physoderma, corn. Tifton.

Erysiphe cichoracearum, powdery mildew of cantaloupe. Sylvester and Tifton, abundant and causing considerable damage.

Macrosporium blight of cantaloupe. Sylvester and Tifton.

Black shank of tobacco. Quincy, very destructive on certain susceptible varieties.

Phoma destructiva, leaf and fruit spot of tomato. Caused considerable loss in at least one field.

Bacterium vignae, bacterial spot of cowpea. Quincy.

SPECIMENS RECEIVED RECENTLY

The following specimens are a few of those which have recently been sent in to the Bureau of Plant Industry largely for determination or for filing.

Ascochyta pisi, blight of pea, Mississippi.
Bacterium pisi, bacterial pod spot of pea, Ohio.
Gymnosporangium juniperi-virginianae, cedar rust on Pyrus melanocarpa, Massachusetts.
Ustilago oxalidis, smut on Oxalis stricta, Pennsylvania.
Botrytis sp., Caragana arborescens, Massachusetts.
Phytophthora cactorum, blight and root rot of ginseng, Iowa.
Plasmopara viticola, downy mildew of grape, Ohio.
Pestalozzia uvicola, leaf blight of grape, Connecticut.
Measles of apple, West Virginia.
Flap tumor (undet.) on apple, West Virginia.
Yellows of strawberry, Massachusetts.